## **AMENDMENT**

Paragraph beginning at line 15 of page 11 has been amended as follows:

4 shows that BMP-2-induced osteopotin gene transcription is mediated by a Hoxc-8 binding site. Figure 4A shows a schematic description of the constructs used in the transfection assays: OPN-266 is the native osteopontin construct; Hox-pGL3 contains the osteopontin Hox binding site linked to the SV40 promoter (SEQ ID NO: mHOX-pGL3 contains the mutated osteopontin Hox binding site 9): (SEQ ID NO: 10). Figure 4B shows that BMP activates the osteopontin promoter. The OPN-266 plasmid was co-transfected in C3H10T1/2 mesenchymal cells with Hoxc-8, Smad1, or Smad4 plasmids alone or in a combination of all three in the presence or of absence of ALK3 plasmid. Figure 4C shows the osteopontin Hox binding site mediates BMP-induced transcription. Hox-pGL3 construct was co-transfected with ALK6 or ALK3 in C3H10T1/2 mesenchymal cells. Figure 4D shows that mutation of Hox binding site abolishes BMP stimulation. Hox-pGL3 construct or mHox-pGL3-pGL3 control plasmid was cotransfected with ALK6, ALK3 or Hoxc-8 plasmids in C3H10T1/2 mesenchymal cells. Cell lysates in panels B, C, and D were assayed for luciferase activity normalized to Renilla luciferase levels 48 h after transfection. Experiments were repeated twice in triplicate.



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

ART UNIT: 1636

APPLICANT: Cao, et al

August 31, 2001

SERIAL NO.: 09/943,724

 $\omega$ **EXAMINER:** McKelvey

FOR: Inhibition of Binding of Hox and Homeo-

Domain Containing Proteins and Uses Thereof §

DOCKET:

D6106D

Commissioner for Patents P.O. Box 1450 Mail Stop Non-Fee Amendment Alexandria, VA 22313-1450

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RESPONSE AND AMENDMENT

TECH CENTER 1600/2900

Dear Sir:

FILED:

In response to an Office Communication mailed April 22, 2003 for the above-referenced patent application, Applicants request that the following amendments be entered and remarks considered.

Applicants believe no fees are due, however, if this is in error please debit all fees due from Deposit Account No. 07-1185 on which the undersigned is allowed to draw.

Respectfully submitted,

Date:

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CERTIFICATE OF MAILING UNDER 37 C.F.R. 1.8

Dear Sir:

I hereby certify under 37 CFR 1.8 that the following correspondence is being deposited with the United States Postal Service as first class mail with sufficient postage on the date indicated below and is addressed to Commissioner for Patents, P.O. Box 1450, Mail Stop Non-Fee Amendment, Alexandria, VA 22313-1450.

- Response to Office Communication 1)
- 2) Return postcard.

Please return the enclosed postcard acknowledging receipt of this correspondence.

Respectfully submitted,

Counsel for Applicant

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